



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/750,681	12/31/2003	Hee Yong Lee	11037-149-999	2190
24341	7590	02/13/2006	EXAMINER	
MORGAN, LEWIS & BOCKIUS, LLP. 2 PALO ALTO SQUARE 3000 EL CAMINO REAL PALO ALTO, CA 94306			GIBSON, ERIC M	
			ART UNIT	PAPER NUMBER
			3661	

DATE MAILED: 02/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/750,681

Applicant(s)

LEE, HEE YONG

Examiner

Eric M. Gibson

Art Unit

3661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 5 is/are rejected.
- 7) ☒ Claim(s) 3,4,6 and 7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/31/03; 1/17/06.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

The information disclosure statement filed 1/17/2006 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Hillman et al. (US006216074B1).

Per claim 1, Hillman teaches an apparatus for controlling fluid supply to a clutch pack of an automatic transmission including a detecting unit (30, figure 1), a control unit (26, figure 1), and a fluid supply unit (22, figure 1).

Per claim 5, Hillman teaches a method for controlling fluid supply to a clutch pack of an automatic transmission including detecting an operating state of a vehicle after an engine has started (44, figure 3), determining if the operating state satisfies a pre-fill control condition (46, figure 3), controlling the fluid supply to a clutch pack on a basis of

Art Unit: 3661

a pre-fill time calculated on a basis of the operating state (column 3, lines 44-60), and determining and stopping the fluid supply when a pre-fill condition release condition is satisfied (time value; column 4, lines 15-21).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hillman in view of Yoshida (US005088353A).

Per claim 2, Hillman teaches the invention as explained in the rejection of claim 1. Hillman includes an engine speed sensor (30, figure 1), but does not explicitly disclose detecting a running of an engine, a turbine speed, an output shaft speed, a fluid temperature, a throttle opening, and a malfunction. However, Hillman does teach that the control module can "receive various other input signals representative of vehicle system parameters" (column 2, lines 58-60). Yoshida teaches a failure detecting system for an automatic transmission that, in addition to monitoring malfunctions, also discloses conventional input signals representative of vehicle system parameters (figure 4). Included in these conventional input signals are a sensor for a running of an engine (306, figure 4), a turbine speed (309, figure 4), a fluid temperature (308, figure 4), and a throttle opening (303, figure 4). An output shaft speed sensor is not explicitly disclosed,

Art Unit: 3661

but is also considered a conventional system parameter that would have been well known to one of ordinary skill in the art at the time of the invention.

Allowable Subject Matter

Claims 3, 4, 6, and 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Per claims 3 and 6, the prior art does not teach or reasonably suggest in combination the present invention including that the pre-fill condition includes that the automatic transmission is in a first speed for the first time after the engine is restarted, the engine speed is greater than a predetermined engine speed and a turbine speed, the output shaft speed is greater than a predetermined output speed, the throttle valve opening is greater than a predetermined opening, a difference between the fluid temperatures of before the engine is stopped and after the engine is restarted is greater than a predetermined difference, and a malfunction of the vehicle is not detected as claimed.

Per claim 4, the prior art does not teach or reasonably suggest in combination the present invention including calculating the pre-fill time on the basis of the recited equation with the noted variables.

Claim 7 depends from claim 6 and serves to further define the invention of claim 6 over the prior art.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Malson (US005910175A) teaches a closed-loop adaptive fuzzy logic hydraulic pressure control for an automatic transmission. McKee et al. (US005853076A) teaches a method and apparatus for calibrating clutch fill rates.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric M. Gibson whose telephone number is (571) 272-6960. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on (571) 272-6956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EMG


THOMAS C. BLACK
SUPERVISORY PATENT EXAMINER
GROUP 3600